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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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KRIEG DEVAULT LLP ONE INDIANA SQUARE, SUITE 2800 INDIANAPOLIS, IN 46204-2709			EXAMINER O CONNOR, CARY E	
			ART UNIT	PAPER NUMBER
			3732	
DATE MAILED: 02/27/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/633,285	Applicant(s) BRANCH ET AL	
	Examiner Cary E. O'Connor	Art Unit 3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8103,7204</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

Claims 14, 28 and 35 are objected to because of the following informalities: In claim 14, line 1, "on" should be changed to --one-- and "space" should be changed to --spaced--. Claims 28 and 35 do not end in a period. Appropriate correction is required.

Claim Rejections - 35 USC § 112

Claims 15, 17 and 35-39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 15 recites the limitation "said light transmitting material" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 17 recites the limitation "said proximal coupling portion" in line 2. There is insufficient antecedent basis for this limitation in the claim.

As to claim 35, it is unclear how the light transmitter can be radially dispersed about the tubular body.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 4, 9, 13-15 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Burgin (4,300,541). Burgin shows a retractor comprising a body 62 extending between a distal end 110 and a proximal end 66 and a concavely curved surface defining a working channel. The body includes a coupling portion 90 for receiving light from a light source 74. The body includes a light emitting surface formed by a discontinuity (protrusion and recess) 102 in an inner wall surface of the body, and spaced from the distal end, for reflection of light from the body into the channel (see Figure 2). As to claim 15, note that the body is made of a plastic light transmitting material (column 4, line 23). As to claim 18, note the shape of the distal end shown in Figure 2.

Claims 35, 36 and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Min (5,785,648). Min shows a retractor comprising a tubular body extending between a distal end and a proximal end. The body includes an inner wall surface defining a working channel and the body is comprised of a light transmittable material (column 4, lines 65-66). A plurality of light transmitters (optical fibers) 44, 46 are radially spaced about and axially extend along the body.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-15, 17-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strauch (3,075,516) in view of Burgin (4,300,541). Strauch shows a retractor 20 comprising a body 31 extending between a distal end 32 and a proximal end and a concavely curved surface defining a working channel. The body includes a coupling portion 33 for receiving light from a light source 36. The body does not include a light emitting surface formed by a discontinuity. Burgin shows a retractor comprising a body 62 extending between a distal end 110 and a proximal end 66 and a concavely curved surface defining a working channel. The body includes a light emitting surface formed by a discontinuity (protrusion and recess) 102 in an inner wall surface of the body, and spaced from the distal end, for reflection of light from the body into the channel. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the body of Strauch with discontinuities as taught by Burgin, in order to direct the light within the working channel and to the work area effectively. As to claims 2, 5, 19 and 21, note that the body is a tube. As to claims 12 and 30, the series of two or more protrusions shown in the embodiment of Figures 4-8 of Burgin. As to claims 17 and 32, note the ring portion 43 and the extension portion 35 of Strauch.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burgin (4,300,541) in view of Heine et al (4,306,546). Burgin teaches that the body is to be molded from a transparent optical wave-guiding material (column 7, line 1) and that the body is molded such that a significant portion of the light entering the body is transmitted to and through the discontinuities. Heine shows an endoscope comprising a light conducting tube. A surface of the tube is coated (masked) to prevent unwanted

light from entering the passage. It would have been obvious to one of ordinary skill in the art at the time the invention was made to mask the outer surface of the body of Burgin, in view of the teachings of Heine, to prevent light from exiting the outer surface so as to focus as much light as possible to and through the discontinuities.

Claims 37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Min (5,785,648) in view of Crossley (6,551,346). Min does not show the light transmitter extending circumferentially or spirally about the tubular body. Crossley shows a light delivery device comprising a tubular body wherein the light transmitter extends spirally about the body. It would have been an obvious matter of design choice to one skilled in the art at the time the invention was made to form the light transmitter of Min in a spiral manner in the body, as taught by Crossley, since applicant has not disclosed that such solve any stated problem or is anything more than one of numerous shapes or configurations a person ordinary skill in the art would find obvious for the purpose of providing light to the working channel. In re Dailey and Eilers, 149 USPQ 47 (1966).

Claims 40, 41, 43, 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strauch (3,075,516) in view of Burgin (4,300,541) and Davis (6,176,824). Strauch shows a retractor 20 comprising a body 31 extending between a distal end 32 and a proximal end and a concavely curved surface defining a working channel. The body includes a coupling portion 33 for receiving light from a light source 36. The body does not include a light emitting surface formed by a discontinuity. Burgin shows a retractor comprising a body 62 extending between a distal end 110 and a proximal end 66 and a

concavely curved surface defining a working channel. The body includes a light emitting surface formed by a discontinuity (protrusion and recess) 102 in an inner wall surface of the body, and spaced from the distal end, for reflection of light from the body into the channel. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the body of Strauch with discontinuities as taught by Burgin, in order to direct the light within the working channel and to the work area effectively. Furthermore, the light source of Strauch is connected directly to the body rather than via a link. Davis shows a retractor comprising a body, a light source 312, and a fiber optic link 314 coupling the light source to the coupling portion of the retractor. It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the retractor of Strauch with a remote light source connected to the retractor by a fiber optic link, as taught by Davis, so that the light source may be easily disconnected from the retractor so the retractor can be sterilized and to make the retractor more lightweight.

Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Strauch (3,075,516) in view of Burgin (4,300,541) and Davis (6,176,824) as applied to claim 40 above, and further in view of Heine et al (4,306,546). Heine shows an endoscope comprising a light conducting tube. A surface of the tube is coated (masked) to prevent unwanted light from entering the passage. It would have been obvious to one of ordinary skill in the art at the time the invention was made to mask the outer surface of the body of Strauch, in view of the teachings of Heine, to prevent light from exiting the outer surface so as to focus as much light as possible to and through the discontinuities.

Claims 40, 41, 43, 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burgin (4,300,541) in view of Davis (6,176,824). Burgin shows a retractor comprising a body 62 extending between a distal end 110 and a proximal end 66 and a concavely curved surface defining a working channel. The body includes a coupling portion 90 for receiving light from a light source 74. The body includes a light emitting surface formed by a discontinuity (protrusion and recess) 102 in an inner wall surface of the body, and spaced from the distal end, for reflection of light from the body into the channel (see Figure 2). As to claim 15, note that the body is made of a plastic light transmitting material (column 4, line 23). The light source of Burgin is connected directly to the body rather than via a link. Davis shows a retractor comprising a body, a light source 312, and a fiber optic link 314 coupling the light source to the coupling portion of the retractor. It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the retractor of Burgin with a remote light source connected to the retractor by a fiber optic link, as taught by Davis, so that the light source may be easily disconnected from the retractor so the retractor can be sterilized and to make the retractor more lightweight.

Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burgin (4,300,541) in view of Davis (6,176,824) as applied to claim 40 above, and further in view of Heine et al (4,306,546). Heine shows an endoscope comprising a light conducting tube. A surface of the tube is coated (masked) to prevent unwanted light from entering the passage. It would have been obvious to one of ordinary skill in the art at the time the invention was made to mask the outer surface of the body of Burgin, in

view of the teachings of Heine, to prevent light from exiting the outer surface so as to focus as much light as possible to and through the discontinuities.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 340 (page 8, line 18) and 628 (page 10, line 14).

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 438 (Fig. 5).

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cary E. O'Connor whose telephone number is 571-272-4715. The examiner can normally be reached on M-Th 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on 571-272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Cary E. O'Connor
Primary Examiner
Art Unit 3732

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